

## CLAIMS

What is claimed is:

1. A method for prenatal diagnosis comprising:  
obtaining a prenatal nucleic acid sample  
5 genotyping at least 5000 SNPs in said sample  
analyzing the genotypes to determine chromosomal abnormalities.
2. The method of claim 1 wherein the prenatal nucleic acid sample is derived from fetal  
cells obtained by amniocentesis.  
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3. The method of claim 1 wherein the prenatal nucleic acid sample is derived from fetal  
cells obtained by chorionic villus sampling.
4. The method of claim 1 wherein the prenatal nucleic acid sample is derived from fetal  
15 cells obtained by drawing blood from the fetal umbilical cord.
5. The method of claim 1 wherein the step of genotyping is performed on a solid  
support.
- 20 6. The method of claim 5 wherein the step of genotyping is performed on a microarray.
7. The method of claim 1 wherein at least 250 ng of genomic DNA is analyzed.

8. The method of claim 7 wherein at least 200 ng of genomic DNA is analyzed.

9. The method of claim 8 wherein at least 150 ng of genomic DNA is analyzed.

5 10. The method of claim 9 wherein at least 100 ng of genomic DNA is analyzed.

11. The method of claim 1 wherein the prenatal nucleic acid sample is amplified prior to genotyping.

10 12. A kit for prenatal diagnosis comprising  
reagents for obtaining a prenatal nucleic acid sample  
reagents for genotyping at least 5000 SNPs in said sample  
reagents for analyzing the genotypes to determine chromosomal abnormalities.

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